DOCUMENT RESUME

ED 215 724

JC 820 188

AUTHOR TITLE

NOTE

Gold, Ben K.

Institutional Research at Los Angeles City College: A

Thirty-Five Year Perspective.

INSTITUTION PUB DATE

Los Angeles City Coll., Calif.

29 Mar 82 21p./

EDRS PRICE DESCRIPTORS

MF01/PC01 Plus Postage. \

College Faculty; College Transfer Students; Community

Colleges; *Educational Trends; Enrollment Trends;

Followup Studies; *Institutional Research;

Nontraditional Students; Remedial Programs; Two Year

Colleges; *Two Year College Students

IDENTIFIERS

*Los Angeles City College CA

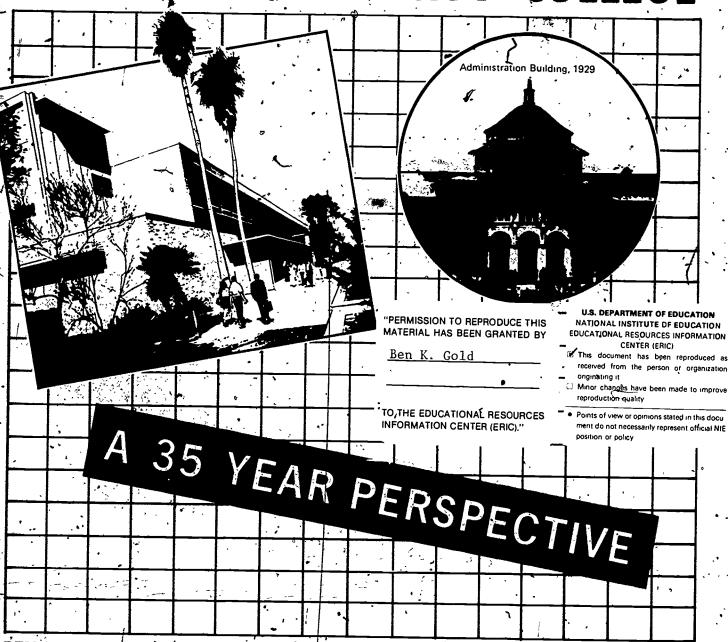
ABSTRACT

Focusing on seven five-year periods, this paper provides a 35-year perspective on institutional research at Los Angeles City College (LACC) and its historical context. For each period, significant world, national, local, and institutional events are highlighted, and research activities and findings relevant to the period are discussed. Parts I and II, covering the years 1947-1952 and 1952-1957, review the growth of LACC and early institutional research conducted through the Counseling Center. Certain research concerns are common to the next five periods, 1957-62, 1962-67, 1967-72, 1972-77, and 1977-82, allowing a look at trends in enrollment, student characteristics, remedial programs, transfer success, and student follow-up. Other research projects were more characteristic of the period during which they were undertaken. For example, during 1957-62, 19 studies were related to testing and placement; during 1962-67, when the number of LACC inner city students increased dramatically, the Research Office was called upon to evaluate new approaches to preparing high risk students; during 1967-72, much of the research effort was directed toward the problem of campus unrest; during 1972-77, special populations, including veterans, handicapped, and displaced homemakers, received much attention; and during 1977-82, research focused largely on "new" populations" in the college. (KL)

Reproductions supplied by EDRS are the best that can be made from the original document.

INSTITUTIONAL BESELLI BESELLI

AT LOS ANGELES CITY COLLEGE



BEN K. GOLD / LOS ANGELES CITY COLLEGE / RESEARCH OFFICE / SPRING 1982

ERÎC

000

Los Angeles City College

"Institutional Research at Los Angeles City College:
A Thirty-five Year Perspective"

Ben K. Gold Research Office \$pring 1982

ERIC

FÖREWORD

The writer is completing this June a thirty-five year tenure at LACC -- eleven years of teaching mathematics and statistics fulltime, eight years of combining teaching, counseling, and initiating an institutional research office, and sixteen years as fulltime director of institutional research.

Having developed a library of over 300 research studies investigating a variety of aspects of LACC's programs and services, it seemed appropriate to climax this series of reports with a paper offering some views over this thirty-five year period from a rather unique vantage point.

Thus, the following discourse, capsuled into seven five-year periods, is offered to provide some nostalgia to those who remember, and to offer some history to those who will serve LACC in the future.

BKG 3/29/82 1947, the year in which Jackie Robinson broke the color barrier in major league baseball, marked the nineteenth year of existence for Los Angeles City College. Harry Truman was President, and students could get to LACQ via the red car on Santa Monica Boulevard or the yellow car on Vermont Avenue. Many things which were to have significant effect on society in general and LACC in particular were still in the future. Among these were freeways, jet air travel, television, the computer, photocopy machines, new math, the "pill", polio vaccine, the State Master Plan for Higher Education, and the civil rights movements. The 1947-1952 period was to see the birth of Israel, snow on the LACC campus, transit fares raised to ten cents, and the play "Mr. Roberts" banned from showing to servicemen.

With the exception of East Los Angeles Junior Callege (beginning its third year), LACC was, in 1947, the only public two year college in Los Angeles, UCLA the only public four year institution. Demand for a college education was beginning to grow at a rapid rate, so much so that, during the five year period, the Los Angeles Unified Board of Education opened four new colleges—two brand new (Valley, Harbor) and two expanded from other schools (Pierce, Trade—Tech). Seeing the need for additional four year institutions in the Los Angeles area, LACC leaders attempted to convince the California legislature (with legislative hearings in the LACC library) that LACC should be expanded to a four year institution. The outcome of these efforts was the creation of a new, independent college on the LACC campus, the Los Angeles State College of Applied Arts and Sciences. This new state college, with its own administration, occupied the bungalow areas south of Monroe Street, while LACC continued to function in the ivy covered brick buildings familiar to anyone who had seen a Hollywood movie showing a college campus. Conditions bordered

2

on the chaotic. LACC's president resigned, and a new president, Dr. Howard 'McDonald, was brought in in 1950 to preside over both institutions and resolve the not unsubstantial conflict. Depending on one's perspective, the single feed of two institutions experiment was a success or a failure.

Meanwhile, LACC continued as a two year institution. World War II was over, patriotism was at a high level, and thousands of students were pursuing their education through an unprecedented opportunity—the G.I. Bill. LACC offered—essentially two educational tracks: "transfer" and "terminal".

Many outstanding students attended. And yet, the Counseling Office reported:

"...the counseling staff has become increasingly interested in the possibility of establishing a curriculum for the underqualified students at this school.

We are in the position of seeing large numbers of students whose basic skills and capacities are inadequate for successful work in the courses presently established at this school."

Documentation of claims such as the above was hard to come by, as any organized efforts that might be called institutional research were not, and still have not been, discovered.4

During the five year period, day enrollments declined (from about 8000 to 6000) as the ex-G.I.'s completed their work, while evening enrollments soared from 2000 to 8000, as more and more offerings were made available in the recently created evening division. Students were predominantly male Caucasians, although the minority population was beginning to grow.

Surely the epic World War II would end war at_least for a generation. But it was not to be. By the end of the period, thousands of G.I.'s were called to duty in Korea.

As in the previous period, G.I.'s accounted for large numbers of LACC students; this time from the Korean conflict. These years were the Eisenhower years, relatively quiet, and LACC enrollments, especially in the daytime, started a climb that was to continue almost uninterrupted to the mid-seventies. Total enrollment went from 14000 in 1952 to 18000 in 1957.

The small state college that had been born on the LACC campus was no longer small and, after some identity crises in both institutions, ties were severed, with LACC in 1955 beginning the John Lombardi years and, shortly after, the state college moving off the campus in two directions, later to become CSULA and CSUN.

Highly significant during this period was the unanimous U.S. Supreme Court Brown decision rejecting the "separate but equal" concept in public schools and mandating integrated schools. Other memorable events during the period included the death of Stalin, the Army-McCarthy hearings, the opening of Disneyland, and the coining of the new word "smog".

During this period, the LACC Counseling Center began to undertake some institutional research. In keeping with the concern expressed earlier about the "underqualified students", Dr. Norman B. Henderson produced in 1955 the first of these studies, examining the possiblity of establishing a cutoff score on the American Council of Education (ACE) College entrance examination below which "nearly all examinees would not succeed in college work." Other papers were produced by various members of the counseling staff. Topics included a study of the international student program, an analysis of the ACE test norms, a look at the general ability level of entering students, an initial inquiry into UCLA transfer performance, and a report on the use of midterm unsatisfactory grades.

The 1957-1962 period began literally with a bang. The Russian satellite SPUTNIK orbited the earth, and America's priorities were suddenly and drastically revised. Engineers and scientists became treasured species and the race to the moon was on.

The period also saw the Brooklyn Dodgers become the Los Angeles Dodgers, the forty-eight states become fifty, the price of a first class stamp rise to five cents, and the ivy covered buildings at LACC come down, to be replaced by "earthquake safe" concrete buildings. Vice President Nixon dedicated one of these buildings in 1959, and the following year lost his bid for the Presidency to John Kennedy. LACC made the front page of the Los Angeles Times on April 23, 1958 with the headline "Faculty Hits Teaching by TV". A highly significant event for California higher education took place in 1960 with the legislature's approval of the "Master Plan for Higher Education in California", a document delineating the functions and responsibilities of the now three segments of higher education in California—the University of California, the California State College and University System, and California's two year colleges.

Toward the end of the period two news items portended things to come:

(1) James Meredith became the first Black to enroll at the University of Mississippi, and (2) President Kennedy indicated he was considering sending troops to South Vietnam.

Due primarily to concerns (already expressed) about the "underqualified students", and indications from the University of California that transfer performance of LACC students seemed to be declining, a halftime position was allocated for the purpose of investigating aspects of the college program relating to these (and other) concerns. During the five year period, seventy one 7 research studies were produced. Twenty-four of these studies concerned

the transfer student, with academic penformance at UCLA, the local state colleges, USC, and other institutions analyzed, usually on an annual basis. One study was deveoted to a two day interviewing session of UCLA transfers by LACC counselors. Nineteen studies were related to testing and placement, including semesterly analysis of student performance on the School and College Ability Test (SCAT) given to entering students, investigations as to its validity in placing students in English and other courses and generally in predicting success at the college, plus several studies assessing the usefulness of some other tests for placement in selected programs. Other studies looked at student characteristics, retention, the recently inaugurated high school honors program, remedial instruction, and disqualification procedures.

Some important findings of the 1957-1962 research studies were:

- (1) LACC entering students' performance on the SCAT was slightly, below national norms on the Verbal part of the test, significantly below on the Quantitative.
- (2) The SCAT had some usefulness in placing students in English, but not in Shorthand or History.
- (3) LACC transfers to UCLA dropped about a half of a point in Grade
 Point Average the first semester after transfer, a slightly
 better record than the all California junior college average.
 Differentials at L.A. State College and at USC were negligible.
- (4) UCLA transfers told LACC counselors they were generally well prepared at LACC, but could have used more essay exams and outside research projects.
- (5) Nearly two thirds of students disqualified from LACC were born in Southern States.
- (6) Counselors indicated after interviews with students in academic difficulty that the major causes of their difficulty were poor study habits and too much outside work.

The period 1962-1967 presaged the turbulent period to follow with some turbulence of its own. In the fall of 1962 President Kennedy successfully engineered a blockade of Cuba. One year later, his promising career was ended by an assassin's bullet in Dallas. His successor, Lyndon Johnson, negotiated the most far reaching civil rights legislation in the nation's history. He also committed the country to extensive involvement in the most unpopular war in the nation's history. In 1963, 200,000 people, under the leadership of Dr. Martin Luther King, marched peacefully on Washington to promote civil rights. In the summer of 1965, Watts exploded with the first-of many urban racial uprisings. Also during the period the Beatles made a memorable appearance in the Hollywood Bowl, and an actor was elected Governor of California.

At LACC. President John Lombardi ended his eleven year tenure in 1966 to become Assistant Superintendent of the Los Angeles Unified District with the assignment to prepare for the coming of the new separate college district in 1969. Dr. Glenn Gooder was named as his successor. Also in 1966, a new fulltime position was budgeted for a Director of Research, thus separating research activities from the Counseling Center. One of the first support activities for the newly created position was the creation of a Research Advisory Committee to assist in identification of areas in need of research and generally to act as a sounding board for proposed research activities. The committee was composed of about fifteen people, representing both faculty and administration, and met usually three times a year. Advice from this committee was found invaluable during the early years of the fulltime position. Research studies attacked a broader range of topics and probed more deeply into subject areas than before the dommittee's existence.

occasioned by some off the events mentioned above, the sixties saw an increasing number of LACC students coming from inner city areas and the problems of the "undereducated" students multiplied. College leaders searched for ways to assist these students to succeed in college. Experimental programs were developed using a variety of untried approaches, including peer tutors and counselors, new learning aids, scheduling in unorthodox time patterns, and team teaching. The Research Office was called upon to play a large role in the evaluation of these new approaches. Ten studies during the period dealt directly with this topic. Other studies included analyses of transfer performance, examining validity of tests for placement of students in certain programs and courses, follow-up of graduates, persistence and characteristics of students in selected programs.

Some findings from the 1962-1967 research studies were:

- (f) Remedial courses offered (in 1962 and 1963) for the "low-ability" student seemed to remedy very little.
- (2) Males consistently outperformed females on the SCAT Entrance Examination in both Verbal and Quantitative abilities.
- (3) LACC transfers to four year institutions performed well, especially those in Engineering and Fine Arts.
- (4) The SCAT test was found to have limited usefulness for placing students in Chemistry, none in Accounting.
- (5) Two thirds of LACC graduates transferred to a four year institution.
- (6) Evaluation of an experimental program for "low-ability" students indicated the program had good possibilities for success.

 The evaluation also provided much information on significant characteristics of these students. This experimental program was the forerunner of the Developmental Communications program.
- (7) An analysis of records of LACC football players indicated their persistence and performance to be little different from that of the general student body.

,1967-1972

The 1967-1972 period was one of tremendous upheaval for LACC, indeed for the entire country. The nation's spirit soared as Neil Armstrong took that tremendous step for mankind, but sank as three national leaders, as well as four college students on an Ohio campus, were felled by bullets. America was heavily committed in Vietnam. Richard Nixon was President, defeating Hubert Humphrey in 1968. A small news item in 1972 about five men held in a plot to "bug" the Democratic offices in the Watergate Hotel seemed insignificant at the time.

Upheaval was literal in 1971 as the strongest earthquake in forty years jolted the Southland, but also took shape in the form of social protest, primarily on college campuses. LACC did not escape as students (plus some non-students) presented "demands" accompanied by violent behavior. In March 1969, during an unsuccessful week long attempt to close LACC, two instructors were hospitalized, many more were severely frightened, and the campus suffered considerable property damage. Later that same spring, Los Angeles voters elected the first Board of Trustees to administer the newly created Los Angeles Community College District. The issue of riots on campuses was a major factor in that election, which produced a six man, one woman board that was to be surrounded in controversy. After guiding LACC through its most difficult period, President Glenn Goodes resigned in 1970, to be followed by Dr. Louis, Kaufman:

During the period, the six Los Angeles colleges became eight, with the addition of Southwest and West Los Angeles colleges. A permanent office for Campus Police was established, as was a new office for administering newly available financial aids. The number of Black faculty rose dramatically, and all began to become acquainted with a new term -- affirmative action.

9

Not surprisingly, much of the institutional research effort during this period was related to the problem of campus unrest. Several studies were made in response to charges of bias and prejudice relating to admission to the college, placement in programs, faculty and administrative behavior, grading practices, and disqualification procedures. A description and evaluation of a newly devised Student Counselor program received nationwide attention and the report was published by the American Association of Junior Colleges. Other efforts included now routine transfer studies, a four year longitudinal study of 1967 entrants, student evaluation of the Counseling Center, studies of enrollment trends, and a four years later look at the 1968 graduates.

Some of the more significant findings included:

- (1) Half of the faculty reported class interruptions during the "strike" week; two thirds showed support for some of the "issues", but none for charges of curriculum inadequacy or racial discrimination at LACC.
- (2) Students also rejected charges that racial discrimination or unfair grading or testing practices were factors in student dropout; major factors were indicated to be lack of clear goals, poor academic preparation, poor study habits, and financial problems.
- (3) Students supported strongly the new "remedial" approaches, especially use of student tutors and student counselors.
- (4) Transfer student performance was at an all-timé high. Half of all transfers attended Cal State L.A.
- (5) Two studies indicated that students felt the most important attributes of good teachers were knowledge of their subject and the ability to communicate it. Interpersonal relationships between students and teachers was rated as not very important.
- (6) A special summer project for students about to be disqualified showed promise in "salvaging" many of these students.

- (7) A twelve year summary of the SCAT entrance examination showed a slight drop in verbal performance but a distinct downward trend in quantitative performance. Students from Los Angeles City high schools performed consistently below out-of city students.
- (8) A survey of students regarding mandatory testing of new students indicated support for the idea, provided its use for placement purposes would be advisory only.
- (9) A longitudinal look at Fall 1967 entering fulltime day students showed that about one in five persisted to the A.A. degree. The number completing the degree within eight semesters was three times the number of those who completed it in four semesters.
- (10) A look at grading practices over a fifteen year period indicated that overall Grade Point Average had risen, primarily due to a decrease in F grades given, and an increase in W grades.
- (11) A study of how the faculty used their time indicated that the "typical" faculty member spent 55 hours per week on activities related to the college.
- (12) A replication of a twenty weap old study on religious attitudes of students, made in conjunction with Harvard University, showed significant changes in attitudes, although much less change at LACC than at Harvard.
- (13) The best single predictor of success in Health Occupation programs was found to be grades in Life Science courses.
- (14) The "high school honors" program at LACC was found to have had a salutary effect on both the students involved and the college.
- (15) Of 31 transfers to UCLA who earned academic honors at that institution, over 80% were ineligible to attend UCLA directly from high school.
- (16) A follow-up study of Legal Secretarial graduates showed a high placement rate-mainly in small Law offices, above average salaries, and plaudits for the LACC program.

By 1972 the turmoil of campus unrest had subsided, but an unprecedented turmoil was about to take place in the nation's White House. Three different men occupied the Oval Office during the 1972-1977 period, with one resigning in disgrace. Although the disastrous Vietnam conflict was to end, violence throughout the world was not, even including murder at the Munich Olympic Games. The period saw the election of a Black mayor in Los Angeles, UCLA basketball teams win eighty-eight straight games, long lines at gas stations, a former LACCD Trustee become Governor, the surge of the Women's movement, the creation of the ninth LACCD college (Mission), and the pocket calculator become a household item.

At LACC, President Kaufman resigned to become Executive Vice Chancellor of LACCD, serving under its new Chancellor, Dr. Leslie Koltai. Dr. John Anthony was appointed President of LACC. "Special populations" began to receive much attention, nationwide and at LACC, viz., Vietnam veterans, handicapped students, "disadvantaged" students, limited English speakers, displaced homemakers, nontraditional majors, the aging. Major emphasis of institutional research during this period was placed on these special groups with twenty studies over, the five year period directly concerned with student characteristics, opinions and performance, and ten studies assessing programs and activities relating to these groups. Other studies looked at various occupational programs, transfer performance, trends in enrollments, persistence, and utilization of campus classrooms.

Findings during the period included:

- (1) Minority student population increased to over three fourths of the student body. Blacks accounted for about half the minority total.
- Numbers of transfers to the state's four year colleges reached all time highs in 1973-1975.
- (3) Trends in enrollments indicated that occupational program enrollment, numbers of females, numbers of Blacks and Hispanics were all increasing.
- (4) Student opinion studies showed preference for a free hour, support for a Health Services fee, and a dislike for the cafeteria.
- (5) Follow-up studies indicated that students in Health Services programs were getting good jobs in their field.
- (6) Students in various off-campus programs gave the programs high marks.
- (7) All classrooms on the campus were found to be 90% utilized between 9 and 12 a.m. and between 7 and 9 p.m. 'Lecture rooms were used at a, 10% rate between 3 and 6 p.m.
- (8) A long range look at Development Communications students showed that many, but not all, were helped to succeed in college.
- (9) A study to identify top priority goals for the college revealed 'Vocational Preparation (closely followed by Individual Personal Development) to be the top choice of faculty, students, and community.
- (10) A special UCLA program to admit selected low-income transfers normally not eligible for admission was found to have limited success; primarily in Fine Arts and in courses requiring verbal rather than quantitative skills.
- (11) A 1ϕ ok at AM degree recipients showed that LACC awarded more two-year degrees than the number awarded in each of twenty-two states.
- (12) Mean "driving distance" from home to LACC was estimated to be slightly over six miles.
- (13) LACC students majoring in Fine Arts numbered well above state and national 2 year college averages.
- (14) A look at withdrawing students showed them in most respects to be representative of the total student body. An exception was that non-working students withdrew at a higher fate than those who had jobs.



During this final period in the scope of this paper, several types of disturbances around the world were noted. Mt. St. Helens erupted. Three Mile 'Island threatened to erupt, but did not. Massive deaths occurred in Guyana. The U.S. Embassy in Iran was seized. On the political scene, the "Moral Majority" precipitated early retirement for several prominent U.S. Senators. Three generations mourned the loss of pop stars Bing Crosby, Elvis Presley, and John Lennon. Interest rates and housing prices skyrocketed. Ronald Reagan ousted Jimmy Carter from the White House. Collective bargaining became a reality in the LACCD. And in 1978 the voters of California overwhelmingly approved Proposition 13.

Proposition 13! Its full impact on education in California, and, in particular, on LACC is yet to be known, not only in terms of finances but also in terms of college mission. The specters of student tuition and state control loom large. Nonetheless, at least through 1982, state "bailout" has kept the community college going.

Here at LACC, President John Anthony resigned to take a position in New York, and Dr. Stelle Feuers became LACC's first woman president, just in time to preside at LACC's fiftieth birthday celebration. Influx of ethnic groups into the vicinity and arrival of Asian "boat people" had significant impact on LACC. Institutional research during the period focused largely on these and other "new populations" in the college, while continuing its customary looks at various trends, evaluations of programs and services, and follow-up studies of students after they leave LACC.

14

Some highlights of research findings from 1977 to 1982 were:

- (1) Numbers of transfers to four year institutions declined sharply, while performance varied--generally below that of previous years.
- (2) Over half of Fall 1980 entering students indicated that the main language spoken at home was not English.
- (3) Percent of students who were Black dropped slightly, White significantly, while that for Asians and Hispanics rose.
- (4) Percent female rose steadily, well over fifty percent.
- (5) A longitudinal study of students who transferred to CSULA found that over 80% of those who persisted to the Bachelor's degree required more than three years at CSULA. Most frequently awarded were degrees in Business and Psychology.
- (6) A ten year look at entering freshmen indicated that their political orientation had shifted in the conservative direction, more of them professed a religious preference, and fewer thought that grades should be abolished.
- (7) A comparison of persistence rates in classes showed a 1978 class drop rate about a third higher than in 1971.
- (8) The landmark Statewide Longitudinal Study¹² identified eighteen different student prototypes. LACC followed the state pattern, demonstrating that very few students follow the "traditional" pattern of staying two years at LACC and then transferring or getting a job.
- (9) The Statewide Longitudinal Study also indicated that over 40% of students entering LACC in Fall 1978 had previous college experience.
- (10) A look at faculty characteristics over the fifty year history of LACC showed a steady growth in percent female from about 25% to 37%.
- (11) An evaluation of the tutoring program revealed that 3000 students were tutored by 300 tutors in a semester, with the program generally receiving strong approval.
- (12) A study conducted in conjunction with UCLA showed that the most important factor in students' success in college is their own effort.

'Yet to be written!

Epilogue

All of the 300+ studies referred to in this paper can be seen in the LACC Research Office. Two indexes of the studies are available, one by subject area and one chronological. Also, since 1967, one page summaries have been prepared for faculty distribution, with copies available in the Research Office. Highlights of findings indicated in this report were selected to illustrate the variety of topics investigated and barely search the surface of the findings of the studies.

It has been said that those who neglect the study of-history are destined to repeat it. It is to be hoped that future LACC leaders will avail themselves of the opportunity to acquaint themselves with the history of LACC that has been developed in the LACC Research Office.

PLUS GA CHANGE, PLUS C'EST LA MEME CHOSE!

NOTES

- 1. January 12; 1949.
- 2. Because of its salty language.
- 3. Memo/from Counseling to Dean of Curriculum Dec. 1, 1949.
- 4. A few isolated individual efforts have been found, the earliest being "A/Profile of Withdrawals from LACC", by Counselor Louise May Snyder, December 1938.
- 5. The conclusion was that such a cutoff could not be established, but use of the test for counseling purposes was recommended.
- 6. The item referred to a faculty response to a proposed plan for instructional television.
- 7. Some might more properly be called Research Briefs, but all are on file in the Research Office.
- Position was that of Coordinating Instructor, later changed by collective bargaining agreement to administration position of Coordinator.
- 9. In fact, the two longest research studies in the Research Office (both over 100 pages) described and evaluated these new approaches.
- 10. Primarily due to the efforts of Claude Ware.
- 11. Miss.Edith Clark was acting President in the early fifties.
- 12. Directed by Dr. Stephen Sheldon, Pierce College Research Coordinator.

ACKNOWLEDGMENTS

Before concluding this report, the writer would like to express deep gratitude to many people for the opportunity to guide the development of the LACC Research Office. Thanks to:

All LACC Presidents* mentioned in this report, who have without exception provided solid-support. Special thanks to John Lombardi who initiated the whole thing and provides counsel and reinforcement to this day, and to Glenn Gooder, who expanded the position to fulltime and whose wealth of ideas has still not been exhausted.

Chancellor Leslie Koltai for his support and public recognition of the LACC Research Office.

Valley College President Emeritus Bob Horton, who provided a sense of direction and considerable expertise in sharing the original 1958 research assignment.

The Counseling staff in the early days who tolerated, encouraged, and participated in the effort to make the concept a reality. A special thanks to Byron Holmes and to Hope Holcomb, without whose firm support the effort would have been futile.

All faculty, staff, and students who have given of their time, energy and goodwill to cooperate the many times they have been asked to participate in a project. Special thanks to those who served on the Research Advisory Committee, particularly Ed Young.

Vance Stine for sharing office responsibilities during several periods and for his unique ability to maintain perspective.

Evelyn McAughan, Shirley Franke, Sheila Watanabe, and Virginia Gonzales for herculean efforts in tabulating data, preparing charts and graphs, and typing reports.

The twenty-five colleagues and graduate students who authored or co-authored one or more studies.

Research colleagues throughout the State for inspiration, sharing, comradery, and cajolery.

*also including Acting Presidents Jim Cox and Jim Heinselman

JUNIOR COLLEGES
96 POWEEL LIBRARY BUILDING
108 ANGELES, CALIFORNIA 90024

EE 36